

REMARKS

The application has been amended and is believed to be in condition for allowance.

The Official Action rejects claims 1, 5, 7, 9-13, and 15-23 as being unpatentable over Russell-Falla et al. in view of Theriault et al. The Official Actions also rejects claim 14 as being unpatentable over Russell-Falla et al. and Theriault et al., and further in view of Baker et al.

The process for blocking display of a web page taught in the Russell-Falla et al. provides a blocking computer program operating on a user computer.

The blocking program configures the user computer as a proxy server (10) which intercepts web pages downloaded to the user computer following requests (50) made with a browser program installed on the user computer. The downloaded web pages are cached either in a hard disk or a random access memory (RAM) unit of the user computer and the cached web pages are analysed for determining whether they can or cannot be displayed on a display screen (52) of the user computer. The blocking program and the browser program are therefore co-located and operating on the same user computer.

The analysis involves a first step (14) of scanning each cached web page (12) to identify regular text expressions in the web page. For each text expression the blocking computer program queries a pre-existing database (30)

containing previously input text expressions that relate to the particular type of content to be blocked from viewing to determine whether or not the expression appears in the database. Where the expression being queried matches one in the database, the matched expression is entered into a "match list" (20). The expressions in the database are individually weighted and the blocking program is arranged to lookup the weighting corresponding to each matched expression to form a weighted list (42) of matching expressions. A rating value (46) of the matching expressions is then calculated based on dividing a scaled summation of the weightings in the weighted list with the total number of words in the initial expressions for analysis. If the calculated rating value of the web page exceeds the applicable allocated threshold value for the particular user, a gate (64) is controlled by a control signal (62) to prevent the web page from being displayed at the user computer.

The blocking program allows a user nominated as the administrator to configure it to block web pages having specified types of content for individual users of the user computer and to allocate a rating value for a particular type of content for each user. The administrator can however review the blocked web page and overrule the blocking program by adding the URL of the web site sending the web page to a "do not block" list of web sites.

The blocking program taught in the Russell-Falla et al. does not block undesirable graphic images on web pages which either do not have words or have words deemed to be good.

The Theriault et al. patent teaches a networked computer system having an enhanced proxy program 300 in a host computer 290. The proxy program intercepts information to be transferred between browser computers 100,101 and an information source 140 in the form of a content server. Information exchanges between the browsers 100,101 and the information source 140 are facilitated by sending queries 160 and responses 170 through the proxy 300 via a communications channel. The proxy modifies a query 160 and/or response 170 according to a set of filtering services that the browser has established. Each browser computer 100,101 communicates with the proxy via a specific port or proximity attachment point 310, 312 of the host computer 290. Each of the ports 310, 312 have a set of the filtering services defined for them. The users may configure filtering services applicable to the particular user computers. Techniques for query modifying include, alone or in combination, restricting access to an information source based on the URL protocol contained in the query and preventing access to specific information sources associated with the browsers as being restricted resources. In column 5, lines 22 to 32, there is described a mechanism

whereby the proxy can send an advance indication of the characteristics of the information requested by the browser, namely annotation of file size, content characteristics (e.g. text, image, video, etc.), content classification (e.g. suitable for children, adults only, etc.). According to column 17, lines 31 to 61, the proxy removes graphic images and all references to the removed graphic images are either removed or replaced with a short text reference, or reduces the size of the graphic images. The proxy also censors responses based on text contents.

The Baker et al. patent teaches a system for selectively restricting access to one or more uniform resource locators (URLs) which may be content servers. The system of the Baker et al. patent has a proxy server (112) configured to control access level of individual user terminals (107, 108 and 109) in a local area network (110) to URLs (101, 102, 103, 104 and 105) via a public network (100). For controlling the access levels, the proxy server (112) has a database (114) with a listing (115) of user terminal clearances for each user terminal, and a listing (116) of URL ratings based on NV for non violent, MV for moderately violent, and V for violent. When a requesting user terminal transmit a URL via LAN (110), a processor (111) in the proxy server (112) queries the listing (115) to determine the allowable resource ratings for the particular requesting terminal, and the listing (116) to

determine the resource rating of the URL for accessing. If the rating of the URL for accessing is not amongst the clearances set for the requesting terminal, the processor (111) denies the request and the requested URL is not sent to the public network (100). Conversely, if the user terminal has clearance for the URL rating, the processor (111) forwards the requested URL. All the URL ratings and the clearances for the user terminals are subjectively categorised by a system administrator.

In view of the above cited references, applicant has amended independent claims 1, 5 and 22 on file.

These amended claims include the features of a first statistical modeling module adapted to provide a first content category prediction based on the size of image transmission activities, a second statistical modeling module adapted to provide a second content category prediction based on the ratio of image to text transmission activities, and analysing means applying a weighting formula to said first and second content category predictions to provide said content category classification prediction. These features are not taught in any of the above cited references.

The blocking program taught in the Russell-Falla patent predicts ratings of information based on text expressions in information downloaded in a user computer. As such, the blocking computer must be installed on each user

computer and the user computers must each be trained to block particular content types based on text expressions. The instant invention, however, use a remote proxy server to predict content type classifications of information transmitted over a communications network by using statistical modeling modules based on certain transmission interaction characteristics of the captured packets, and the transmitted information does not reach the intended user computer if it is predicted to be of an undesirable content category.

Applicant therefore believes amended claims 1, 5 and 22 are not obvious in view of the Russell-Falla et al. patent and the Theriault et al. patent, and the Baker et al. patent. As all other claims are dependent to one of amended claims 1, 5 an 22, these dependent claims are accordingly also patentable.

New claims have been added which are also believed to be non-obvious.

None of the references as found to disclose transmission interaction characteristics further including iv) variations in content patterns within the packets of the transmission; and said statistic modeling arrangement further having a third statistical modeling module adapted to provide a third content category prediction based on a count of occurrences words in the content patterns matching words in a list of known undesirable words, and the analysing means

applying a weighting formula to said first, second and third content category predictions to provide said content category classification prediction.

Thus, these features are also believe patentable in their own right.

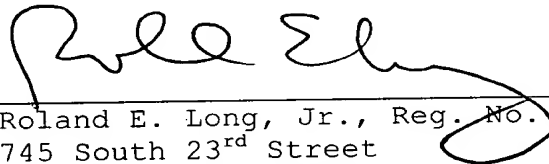
In light of the above remarks, applicant respectfully submits the claims as presented are not obvious when compared to the cited prior art.

Therefore, reconsideration and allowance of all the claims are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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